UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

42798 7590 11/07/2008 FITCH, EVEN, TABIN & FLANNERY P. O. BOX 18415 WASHINGTON, DC 20036 EXAMINER

FITZGERALD, JOHN P

ART UNIT PAPER NUMBER

2856

DATE MAILED: 11/07/2008

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|-----------------|-------------|----------------------|---------------------|------------------|--|
| 10/830,095 | 04/23/2004 | Seiichi Ono | 8029/84010 | 7519 | |

TITLE OF INVENTION: LEAK DETECTOR FOR DETECTING LEAK OF LIQUID INJECTED INTO BLOOD VESSEL USING PULSE SIGNAL

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | YES | \$755 | \$300 | \$0 | \$1055 | 02/09/2009 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

| appropriate. All further indicated unless corrects maintenance fee notifica | correspondence includir ed below or directed oth tions. | or transm ig the Pat- nerwise in | ent, advance or Block 1, by (a | ders and notification o specifying a new cor | of ma | aintenance fees w ondence address; | ill be and/or | mailed to the current (b) indicating a sepa | correspond rate "FEE | lence address as ADDRESS" for |
|--|--|--|--|---|--|--|---|---|---|--|
| | ENCE ADDRESS (Note: Use Bi | ock I for any | change of address) | N F P h | Note: Pee(s paper pave | A certificate of r) Transmittal. This s. Each additional its own certificate | nailing certif paper of mai | can only be used for icate cannot be used for such as an assignme ling or transmission. | r domestic or any othe nt or forma | mailings of the r accompanying d drawing, must |
| FITCH, EVEN P. O. BOX 1841 WASHINGTON | | | ? | | | Cont | ificate | of Mailing or Trans i) Transmittal is being ficient postage for firs ISSUE FEE address I) 273-2885, on the d | mirrion | |
| | | | | | | | | | | (Depositor's name) |
| | | | | | | | | | | (Signature) |
| | | | | | | | | | | (Date) |
| APPLICATION NO. | FILING DATE | | | FIRST NAMED INVENTO | OR | | ATTO | RNEY DOCKET NO. | CONFIR | MATION NO. |
| 10/830,095 TITLE OF INVENTION | 04/23/2004 :: LEAK DETECTOR FO | OR DETE | CTING LEAK | Seiichi Ono OF LIQUID INJECTEI | D IN | TO BLOOD VES: | SEL U | 8029/84010 SING PULSE SIGNA | | 7519 |
| APPLN. TYPE | SMALL ENTITY | ISSUI | E FEE DUE | PUBLICATION FEE DU | Œ | PREV. PAID ISSUE | FEE | TOTAL FEE(S) DUE | D | ATE DUE |
| nonprovisional | YES | | \$755 | \$300 | | \$0 | | \$1055 | 0: | 2/09/2009 |
| EXAM | IINER | AR | RT UNIT | CLASS-SUBCLASS | | | | | | |
| FITZGERAI | LD, JOHN P | | 2856 | 073-861250 | _ | | | | | |
| "Fee Address" ind PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A | ondence address (or Cha 8/122) attached. ication (or "Fee Address 12 or more recent) attach ND RESIDENCE DATA less an assignce is ident h in 37 CFR 3.II. Comp | nge of Cor " Indicationed. Use of | or form f a Customer PRINTED ON | | to intiverse to interest to in | 3 registered patent ely, firm (having as a spent) and the name news or agents. If r rinted. | members of use is ic | er a 2 | | as been filed for |
| Please check the appropr | iate assignee category or | categorie | s (will not be pr | inted on the patent): | ا ا | Individual 🚨 Co | rporati | on or other private gro | up entity | Government |
| 4a. The following fee(s) Issue Fee Publication Fee (N | vo small entity discount p | permitted) | | A check is enclosed Payment by credit of The Director is here overpayment, to De | d. card | . Form PTO-2038 | is atta | ched. | | |
| - 11 | s SMALL ENTITY state | is. See 37 | | ☐ b. Applicant is no l | | | | | | |
| NOTE: The Issue Fee an interest as shown by the | d Publication Fee (if req records of the United Sta | uired) will tes Patent | I not be accepted and Trademark | from anyone other that Office. | ın th | e applicant; a regis | tered : | attorney or agent; or th | e assignee | or other party in |
| Authorized Signature | | | | | | Date | | | | |
| Typed or printed name | | | | | | Registration N | o | | | |
| This collection of inform an application. Confiden submitting the complete this form and/or suggests Box 1450, Alexandria, V Alexandria, Virginia 223 | nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this but 'irginia 22313-1450. DC k13-1450. | FR 1.311. U.S.C. 12 USPTO. rden, shou O NOT SE | The information 22 and 37 CFR Time will vary old be sent to the ND FEES OR 6 | on is required to obtain of 1.14. This collection is depending upon the in- e Chief Information Off COMPLETED FORMS | or re estin divid ficer TO | tain a benefit by the mated to take 12 n dual case. Any con y U.S. Patent and ' THIS ADDRESS. | ne publ ninutes nment Fraden SENI | ic which is to file (and to complete, includin s on the amount of tin hark Office, U.S. Depo O TO: Commissioner | by the US g gathering ne you req urtment of or Patents, | PTO to process) §, preparing, and uire to complete Commerce, P.O. P.O. Box 1450, |

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|-----------------------|-----------------|----------------------|---------------------|------------------|--|
| 10/830,095 04/23/2004 | | Seiichi Ono | 8029/84010 | 7519 | |
| 42798 7. | 590 11/07/2008 | EXAMINER | | | |
| FITCH, EVEN, | TABIN & FLANNEI | FTIZGERALD, JOHN P | | | |
| P. O. BOX 18415 | | ART UNIT PAPER NUMB | | | |
| WASHINGTON, | DC 20036 | 2856 | | | |

DATE MAILED: 11/07/2008

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 752 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 752 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

| Application No. | Applicant(s) |
|-----------------|--------------|
| 10/830,095 | ONO, SEIICHI |
| Examiner | Art Unit |
| IOHN FITZGERALD | 2856 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included
herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS
NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative
of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- 1. This communication is responsive to 14 October 2008.
- 2. The allowed claim(s) is/are 2 and 3.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some* c) None of the:
 - 1. A Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____
 - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) Thereto or 2) to Paper No./Mail Date
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2.
 Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08),
- Paper No./Mail Date <u>11/16/04</u>
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date .
- 7. Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. 🗌 Other ___

Application/Control Number: 10/830,095 Page 2

Art Unit: 2856

DETAILED ACTION

Allowable Subject Matter

- Claims 2 and 3 are allowed over the Prior Art of record.
- 2. The following is an examiner's statement of reasons for allowance: The primary reasons for allowance of independent claims 2 and 3 are the inclusion of the specific limitations regarding an interval storing means and its functional capabilities, in combination, with the other recited elements in a leak detector for detecting a leak of a liquid injected through a needle into a blood vessel near the surface of a human body.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Fitzgerald whose telephone number is (571) 272-2843. The examiner can normally be reached on Monday-Friday from 7:00 AM to 3:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams, can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR

Application/Control Number: 10/830,095 Page 3

Art Unit: 2856

only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/John Fitzgerald/ Examiner, Art Unit 2856 10/26/08